5

10

REPLICA AMPLIFICATION OF NUCLEIC ACID ARRAYS

ABSTRACT OF THE DISCLOSURE

Disclosed are methods of producing immobilized arrays of proteins. Included are methods for producing high density arrays of nucleic acids, amplifying arrays, and replicating such arrays. The nucleic acid molecules present on the support, whether amplified or not, are then expressed to produce proteins which are immobilized to the nucleic acid upon production or can be can be immobilized directly to the support. Alternatively, proteins can be bound to the nucleic acid molecules to produce protein arrays of the present invention. Arrays produced by the disclosed methods may include both nucleic acids and proteins or the nucleic acids can be removed from the array leaving the proteins. The disclosed methods also include replication of protein arrays in which a subset of the proteins that are produced can be transferred to an additional support where they are then immobilized.